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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,576	03/31/2000	Robert G. Field	SUN1P252/P4198	2536
22434	7590	06/10/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 778 BERKELEY, CA 94704-0778			KISS, ERIC B	
		ART UNIT	PAPER NUMBER	
		2122		
DATE MAILED: 06/10/2004				

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/540,576	FIELD ET AL.
	Examiner Eric B. Kiss	Art Unit 2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 March 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 20 and 24-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 20 and 24-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 October 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

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DETAILED ACTION

1. The amendment filed March 23, 2004, has been received and entered. Claims 20 and 24-32 are pending.

Prosecution Reopened

2. In view of the appeal brief filed on March 23, 2004, PROSECUTION IS HEREBY REOPENED. In said appeal brief, Applicant presents arguments based on an unclear discussion of a presentation titled "The New Java™ Platform Debugger Architecture," given in a public forum on March 26, 1998. A summary of this issue and a clarified discussion of the previously applied rejections are set forth below to address this problem.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

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3. In the Interview Summary mailed December 9, 2003 (Paper No. 18), describing the nature of the Interview conducted on December 5, 2003, the following was recorded:

Mr. Mahboubian [(Applicant's representative)] suggested that of the two slideshow presentations submitted (IDS; Paper No. 6), only the 1998 presentation qualifies as Prior Art, and that the Office action appears to have referenced the 1999 presentation in making a rejection under 35 U.S.C. §102(b), based on public use. Evidence supporting such a claim was provided, namely the numbering of slides referred to in the detailed statement of rejection. The Examiner did not dispute this point, but offered that the actual grounds of rejection stated is based upon the 1998 presentation, and it is believed that the 1998 presentation slides provided by Applicant still support the reasoned statements of the rejection....

The above discussion relates to the Examiners unintentional citations of the presentations slides related to another public disclosure of the invention predating the filing of the instant application (and the provisional application, 60/145,136, filed July 21, 1999, from which benefit of filing date is claimed), namely the presentation titled "The Java™ Platform Debugger Architecture," given in a public forum on June 16, 1999. The Examiner acknowledged during the above-cited Interview that citations referring to these slides should instead have referred to slides corresponding in content from the 1998 presentation. It was asserted during the Interview that the 1998 slides still support the reasoned statements provided with the maintained rejection.

Priority

4. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

However, the provisional application upon which priority is claimed does not appear to provide express support under 35 U.S.C. 112 for claims 20 and 24-32 of this application, and, in

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particular, those features related to parsing a formal specification and generating front-end and back-end debugger portions.

Applicant is invited to indicate those sections of the provisional application's disclosure that provide support for such features. However, it is noted that the Examiner has maintained that such features would have been either inherent or otherwise obvious to one of ordinary skill in the computer art at the time the invention was made (see the rejection applied in the previous office action, which is maintained and reproduced below). Therefore, the Examiner presumes Applicant's priority claim is valid based on those missing features being inherently part of, or obvious over, the disclosure of the provisional application (accepting that the provisional application is sufficient in providing adequate support under 35 U.S.C. §112 for claims 20 and 24-32). Should Applicant fail to provide an indication of supporting portions of the provisional application, as originally filed, then the Examiner will maintain that the priority claim is valid only on the basis that the above-referenced features are either inherent or otherwise would have been obvious to one of ordinary skill in the computer art at the time the invention was made, and accordingly, Applicant's arguments (see, for example, sections C and D of Applicant's appeal brief filed March 23, 2004) that such features are a novel and non-obvious improvement, would be moot.

Claim Rejections - 35 USC §§ 102(b), 103(a)

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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It should be noted that 35 U.S.C. 102(b) may create a bar to patentability either alone, if the device in public use or placed on sale anticipates a later claimed invention, or in conjunction with 35 U.S.C. 103, if the claimed invention would have been obvious from the device in conjunction with the prior art. *LaBounty Mfg. v. United States International Trade Commission*, 958 F.2d 1066, 1071, 22 USPQ2d 1025, 1028 (Fed. Cir. 1992).

6. Claims 20 and 24-32 are rejected under 35 U.S.C. 102(b) based upon a public use of the invention or, in the alternative, under 35 U.S.C. 103(a) as obvious over the evidence of public use presented below.

6.1. Evidence of public use

The following is a summary of the evidence available to the Examiner that suggests that the claimed invention was known and in public use more than one year prior to the instant application's effective filing date, *i.e.*, July 21, 1999, the filing date of Provisional Application No. 60/145136:

- a. On March 26, 1998, Robert Field and Gordon Hirsch (named inventors in the instant application), together with James McIlree (presumed not to be an inventor since he is not listed in the instant application), gave a presentation titled "The New Java™ Platform Debugger Architecture" at the Moscone Convention Center in San Francisco, California, at approximately 12:15pm, said presentation lasting approximately one hour. This is corroborated by "JavaOne 1998 Presentation" (submitted in Information Disclosure Statement filed October 30, 2002 and hereinafter *Slideshow*), along with

“Birds of a Feather, '98 JavaOne conference schedule”, (cited in previous office actions and hereinafter *Schedule*).

The Examiner presumes that Mr. Field, Mr. Hirsch, and Mr. McIlree did not limit their presentation to merely showing the slides (as provided by the Applicant in an Information Disclosure Statement at the Examiner’s request) to their audience without any further explanation, discussion, and/or demonstration. The Examiner will, of course, fully consider any affirmative statement from Applicant attesting otherwise.

b. At least three releases of Java™ Platform Debugger Architecture software and/or documentation describing such software were made available prior to the instant application’s effective filing date, *i.e.*, July 21, 1999, the filing date of Provisional Application No. 60/145136. This is corroborated by mentions of “Beta 2”, “Beta 1”, and “Early Access” versions of the Java™ Platform Debugger Architecture in Applicant’s provisional application (see the first 8-page portion titled “Java™ Platform Debugger Architecture – RC1 Readme”).

Evidence newly discovered by the Examiner suggests that the release dates of the above-mentioned software and/or documentation are at least as early as:

- i. “Early Access” – May 1998 (see “Java News from May, 1998”, cited with this action; and further see “java-security@sun.com archives – May 1998 (#162)”, cited with this action)
- ii. “Beta 1” – December 29, 1998 (see “Java News from December, 1998”, cited with this action)

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- iii. "Beta 2" – March 20, 1999 (see "Java News from March, 1999", cited with this action).

It is noted that if Applicant's priority claim is later denied, then the effective filing date of the instant application would become March 31, 2000, and both the "Beta 1" and "Beta 2" releases could be considered prior art and public use under 35 U.S.C. §102(b). The "Early Access" release can be considered prior art and public use under 35 U.S.C. §102(b) regardless of whether Applicant's priority claim is valid.

6.2. Discussion of evidence of public use

As was stated in the Final Rejection mailed September 24, 2003 (Paper No. 17) at p. 9, lines 18-23:

Again, if convincing evidence can be brought forward showing that the above-cited presentation did not, in fact, disclose the same invention which is presently claimed nor was the presently claimed invention embodied in any product made available or otherwise demonstrated or discussed prior to one year before the instant application's filing date, then the Examiner will rest his case and withdraw the rejections under 35 U.S.C. §102(b), based on public use of the invention [emphasis added].

The Examiner wishes to again stress that the primary basis for the maintained rejections of claims 20 and 24-32 is the public use bar under 35 U.S.C. §102(b). The slides from presentation titled "The New Java™ Platform Debugger Architecture," given in a public forum on March 26, 1998, have been previously cited as evidence supporting the rejection. Applicant has affirmed that the features not disclosed in the presentation on March 26, 1998, include: inputting and parsing the formal specification, generating a front-end debugger program portion from the formal specification, and generating a back-end debugger program portion from the

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formal specification, and automatically generating both the front-end and back-end components of a debugging system based on the same formal specification (see Applicant's remarks on p. 5 of the Amendment After Final, filed March 23, 2004). However, in view of further evidence of public use discovered by the Examiner and presented above, the rejection of claims 20 and 24-32 is maintained. Applicant has not sufficiently addressed the grounds of rejection, as is further evident by Applicant's presentation of the following single issue on appeal:

- (1) The only issue presented on appeal is whether claims 20 and 24-32 are taught or suggested by material disclosed by the Applicant ("slideshow") in an information Disclosure Statement dated October 30, 2002 in view of "Official Notice" taken by the Examiner based on Aho et al., "Compilers, Principles, Techniques, and Tools," 1986, Addison Wesley ("Aho et al.").

The main issue presented by the Examiner is not whether the slides teach the claim features, but rather whether those claimed features were publicly disclosed or otherwise made available to the public more than one year prior to the instant application's effective filing date. Below is a clarified version of the discussion of the presentation slide evidence that was provided in previous Office actions. Note that corrected slide citations have been provided. To avoid future confusion, the Examiner hereinafter refers to the individual slides by the page numbers provided in Appendix B of Applicant's appeal brief (B-1 through B-9).

Statements to the effect that it is unclear, based on materials made available to the Examiner, whether or not the cited presentation expressly disclosed certain claimed features have been made in reference to the above-described presumption that the presenters further described, discussed, and/or demonstrated features shown on the slides in greater detail. As Applicant has not provided any additional materials related to the slide presentation or any statement or evidence that the presenters merely showed the slides to their audience in silence, the Examiner

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cannot form a definite conclusion of whether or not such features were disclosed by the presenters. Instead, the Examiner had invited clarification by the Applicant numerous times in previous Office actions (see, for example, Paper No. 9, the Final Rejection mailed November 20, 2002, at p. 7, lines 4-7; Paper No. 12, the Advisory Action mailed February 11, 2003, at p. 2, lines 1-7; and Paper No. 17, the Final Rejection mailed September 24, 2003, at p. 9, lines 18-23) while providing an alternative basis of rejection, namely reasons why such features are believed to be obvious over the available evidence, in the event that Applicant could make a showing that such features were, in fact, not disclosed.

Applicant's affirmative statements (see again, Applicant's remarks on p. 5 of the Amendment After Final, filed March 23, 2004) are taken as a showing that the presenters (including non-inventor James McIlree) in no way mentioned or suggested inputting and parsing the formal specification, generating a front-end debugger program portion from the formal specification, and generating a back-end debugger program portion from the formal specification, and automatically generating both the front-end and back-end components of a debugging system based on the same formal specification. However, these statements are not sufficient in showing that these features were not incorporated into any publicly available software or described in any documentation (such as the Early Access version of the Java™ Platform Debugger Architecture).

The cited presentation (given in a public forum on March 26, 1998; see *Schedule*, p. 34) disclosed:

Claim 20

a formal specification defining a high level debugging communication protocol written in JAVA Debug Wire Protocol (JDWP) declarative specification language (see, for example, pages B-7 and B-8 of *Slideshow*);

a front-end debugger program portion comprising JAVA programming language code running on a first virtual machine (see, for example, pages B-7 and B-9 of *Slideshow*);

a back-end JAVA debugger program portion comprising C language code controlling and communicating with a second virtual machine (see, for example, pages B-3 through B-7 of *Slideshow*); and

the JAVA front-end debugger program and JAVA back-end debugger program being compatible with each other (see, for example, pages B-7 and B-8 of *Slideshow*);

Claim 24

sending events generated in the second virtual machine to the front-end via the back-end debugger program code portion (see, for example, pages B-5 and B-7 through B-9 of *Slideshow*);

Claim 25

the front-end reading and parsing events from the back-end debugger code portion (see, for example, pages B-5 and B-7 through B-9 of *Slideshow*);

Claim 26

the front-end processing module performing operations related to requests made through the front-end debugger program by the debugger application program (see, for example, pages B-5 and B-7 through B-9 of *Slideshow*);

Claim 27

the front-end processing module writing formatted requests (see, for example, pages B-5 and B-7 through B-9 of *Slideshow*);

Claims 28 and 31

the back-end processing module performing operations related to event processing and request processing (see, for example, pages B-5 and B-7 through B-9 of *Slideshow*);

Claim 29

the event processing operations including sending an event which was generated through the virtual machine debugging interface to the front-end debugging portion (see, for example, pages B-5 and B-7 through B-9 of *Slideshow*);

Claim 30

the request processing operations including reading and parsing formatted requests from the front-end debugger program portion (see, for example, pages B-5 and B-7 through B-9 of *Slideshow*); and

Claim 32

the front-end debugger program portion including a class which is used by the front-end debugger program portion to send and receive information over the debugging communication protocol (see, for example, pages B-5 and B-7 through B-9 of *Slideshow*).

Applicant has affirmed that the cited presentation did not include any discussion of inputting the formal specification into a code generator, parsing the formal specification, and generating the JAVA front-end debugger program portion and back-end JAVA debugger program portion from the formal specification after parsing (see again, Applicant's remarks on p. 5 of the Amendment After Final, filed March 23, 2004). The Examiner provides the following support for the rejection under 35 U.S.C. §103(a), correcting this deficiency. It is noted that the front-end and back-end debugger program portions are disclosed as based on an implementation of the JDWP specification. Official Notice is taken that in order to arrive at a machine-readable implementation of a human-readable specification, a compilation process comprising parsing the input specification and generating the output code would have been used and such a process is well known and commonly practiced in the computer art. An exemplary description of this practice can be found in Alfred V. Aho, et al., "Compilers, Principles, Techniques, and Tools," 1986, Addison-Wesley (hereinafter *Aho et al.*). For instance, Fig. 1.9 on page 10 of *Aho et al.* shows the phases of such a compilation process, including syntax analysis (or parsing) and code generation. The alternative to compiling is writing the code directly in assembly language or

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binary machine language, which is typically impractical. Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to incorporate parsing and code generation into the disclosed implementation as a widely accepted means to achieve such an implementation. The act of compiling source code is exceedingly well known in the computer art, as are the basic components, including parsers and code generators, that typical compilers comprise. The cited text of *Aho et al.* provides an introductory teaching of compilers and their components and as such, provides a description of a compiler, and proper motivation to use a compiler in translating computer code.

Conclusion

7. The finality of the previous Office action has been withdrawn. However, this action serves merely to clarify the position maintained by the Examiner with respect to the rejection of claims 20 and 24-32. No new grounds of rejection have been applied, and claims 20 and 24-32 have not been amended since the previous final rejection (Paper No. 17) was mailed (September 24, 2003). Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. In order to be considered a bona fide response, Applicant's reply must appropriately address the issue of public use set forth in this and previous Office actions. Specifically, Applicant must appropriately clarify the nature and extent of the public disclosures and software embodiments that are mentioned in the evidence cited by the Examiner, and Applicant must appropriately clarify which, if any, non-obvious claim limitations were not disclosed, demonstrated, or otherwise made available to the public more than one year prior to the instant application's effective filing date. Proper evidence or clearly worded affirmative statements or affidavits supporting Applicant's position are necessary to resolve this continuingly outstanding issue.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (703) 305-7737. The Examiner can normally be reached on Tue. - Fri., 7:30 am - 5:00 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EBK/*EBK*
June 1, 2004



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